UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/580,861	03/28/2007	Guenter Dobler	095309.57715US	7586

23911 7590 06/23/2009

CROWELL & MORING LLP
INTELLECTUAL PROPERTY GROUP
P.O. BOX 14300
WASHINGTON, DC 20044-4300

EXAMINER	
KELLEY, STEVEN SHAUN	
ART UNIT	**PAPER NUMBER**
2617	
MAIL DATE	**DELIVERY MODE**
06/23/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/580,861	DOBLER ET AL.	
	Examiner	Art Unit	
	STEVEN KELLEY	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *3-28-07*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *25-48* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *25-48* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *5-26-06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 25 and 41 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. There is no antecedent basis for "the operation" recited in claim 25. There is no antecedent basis for "the restricted mode" and "the cause" recited in claim 41.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 25-31, 34 and 40-46 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Pub. 2003/0054865 to Byers et al. (hereinafter "Byers").

Regarding claim 25, Byers teaches a user interface for a communication system in a motor vehicle (see section [0004]) which, in a restricted operating mode, restricts a

functionality of a radio interface for wireless connection to a radio communication network, said interface including a device for activating a waiting function for an incoming call in a restricted operating mode ("Courtesy" button 68 and the "1-9" "keys in numeric keypad 60, as shown in Fig. 1 on mobile terminal 10, form the recited "interface", as when a user presses "Courtesy" button 68 the call waiting function is activated, as recited), which informs the caller of at least one of the cause and expected duration of the operation with restricted functionality (user may then press any of the 1-9 "keys", which determines the duration of the hold (see Fig. 3 for the table of hold values associated with each of the 1-9 keys, which is inserted into the message to the caller, and see for example, section [0023] which teaches "The mobile user you are calling has activated the courtesy alert feature. Please stay on the line and he or she will be able to take your call in 10 seconds").

Regarding claim 41, Byers teaches an operating method for a communication system in a motor vehicle (see section [0004]), the functionality of which is restricted in dependence on predetermined conditions in operation, said method comprising: activating, in the operation with restricted functionality, a waiting function with an incoming call (user presses "Courtesy" button 68 to activate the call waiting function, as recited) determining the expected duration of the restricted mode (user presses one of the 1-9 keys, which "determines" the expected duration of the restricted mode, as recited); and informing the caller about at least one of the cause and the expected duration of the operation with restricted functionality (see section [0023] which teaches

"The mobile user you are calling has activated the courtesy alert feature. Please stay on the line and he or she will be able to take your call in 10 seconds").

Regarding claim 26, which recites "further comprising a device for determining an expected duration of the restricted operating mode", the "device" which would "determine" the expected duration, would be one of the 1-9 keys.

Regarding claims 27 and 42, which recite "wherein the waiting function arranges an indication of the restricted operating mode in dependence on at least one of the expected duration of the restricted operating mode and the person who is calling", the "indication of the restricted operating mode" is the expected duration of call holding as shown in Fig. 3.

Regarding claims 28 and 43, which recite "wherein the indication comprises at least one of a voice output for outputting information and a sound output for bridging the waiting time", the message to the caller indicating an amount of time on hold (as taught in section [0023]) is an "indication comprising voice output" as recited.

Regarding claims 29 and 44, which recite "wherein the indication comprises at least one output pause with an adjustable duration", as the values of call holding may be one of 10, 20, or 30 seconds and 1, 2, or 3 minutes, and the voice message to the caller will be less than these call holding times, each message will have a pause (no voice message, i.e. silence) with an "adjustable duration", as the amount of pause changes based on the amount of silence during the hold.

Regarding claims 30 and 45, which recite "wherein the at least one output pause can be inserted at least one of before or after the information output and before or after the sound output", as described above with respect to claims 29 and 44, a pause (silence) is inherently present and/or inserted while holding a call.

Regarding claim 31, which recites "further including at least two time ranges provided for arranging the indication, one of said at least two ranges is selected in dependence on the expected duration determined for the restricted operating mode, wherein the time range containing the value of the expected duration is selected", as described above with respect to claim 25, one of the at least two time ranges (as shown in Fig. 3) may be "selected" by the user depressing one of the 1-9 keys.

Regarding claims 34 and 46, which recite "wherein the sound output comprises at least one of discrete sound events and changeable sound events", the message to the caller indicating an amount of time on hold (as taught in section [0023]) is a "discrete sound event" as recited.

Regarding claim 40, which recites "A communication system for a motor vehicle with a radio interface for wireless connection to a radio communication network and for setting up a corresponding communication link, including a user interface according to claim 25", the mobile terminal 10 inherently includes a "radio interface" for establishing communication links (telephone calls) as recited.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 25-31, 34 and 40-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 7,280,852 to Shimizu et al. ("Shimizu") in view of Byers.

Regarding claim 25, Shimizu teaches a user interface for a communication system in a motor vehicle which, in a restricted operating mode, restricts a functionality of a radio interface for wireless connection to a radio communication network, said interface including a device for activating a waiting function for an incoming call in a restricted operating mode (action determination unit 13 in Fig. 3, as described in columns 5-7 which receives inputs from situation analysis unit 12 and determines to place an incoming call on hold based on the detected situation of the car/driver), which informs the caller of at least one of the cause and expected duration of the operation with restricted functionality (see columns 10-11 which teach notifying the calling party that "the call is being held").

Although Shimizu teaches determining a number of car/driver situations, where these different situations each have a varying amount of severity and/or time to

overcome, and Shimizu teaches notifies the calling party that the call is on hold, Shimizu does not give an indication of the "expected duration", of the hold as recited.

In an analogous art, Byers teaches a mobile phone system used in a car, where the message to the caller includes information relating to the "expected duration" of the hold as recited. See for example, the table of hold values shown in Fig. 3, and see for example, section [0023] which teaches "The mobile user you are calling has activated the courtesy alert feature. Please stay on the line and he or she will be able to take your call in 10 seconds").

Therefore, as both Shimzu and Byers are related to call holding while driving, it would have been obvious to one of ordinary skill to modify the notification message of Shimizu to include "expected duration" information (as taught by Byers) in order to enhance the messages provided to the calling party, and avoid callback procedures.

Regarding claim 41, Shimizu teaches an operating method for a communication system in a motor vehicle, the functionality of which is restricted in dependence on predetermined conditions in operation, said method comprising: activating, in the operation with restricted functionality, a waiting function with an incoming call (action determination unit 13 in Fig. 3, as described in columns 5-7 which receives inputs from situation analysis unit 12 and determines to place an incoming call on hold based on the detected situation of the car/driver).

Although Shimizu teaches determining a number of car/driver situations, where these different situations each have a varying amount of severity and/or time to

overcome, and Shimizu teaches notifies the calling party that the call is on hold, Shimizu does not "determine an expected duration of the restricted mode" and "inform the caller about the expected duration", as recited.

In an analogous art, Byers teaches a mobile phone system used in a car, where the message to the caller includes information relating to the "expected duration" of the hold as recited. See for example, the table of hold values shown in Fig. 3, and see for example, section [0023] which teaches "The mobile user you are calling has activated the courtesy alert feature. Please stay on the line and he or she will be able to take your call in 10 seconds").

Therefore, as the situation analysis unit and action determination unit of Shimzu are capable of determining different car/driver scenarios (which inherently have different levels of severity and or time related concerns), it would have been obvious to one of ordinary skill to modify the system to Shimizu to associate each determined situation (as shown in Fig. 4) with an "expected time duration" (thereby "determining a time duration" when the situation is determined) and to include this expected time duration information into the calling party notification messages (as taught by Byers) in order to enhance the messages provided to the calling party of Shimizu, and avoid callback procedures.

Regarding claim 26, which recites "further comprising a device for determining an expected duration of the restricted operating mode", as described above, by modifying Shimizu to associate and store an expected duration (as taught by Byers) with each of the situations (as shown in Fig. 4 of Shimizu), the "device" which would determine the

expected duration would be the action determination unit 13 in Fig. 3., which as described in columns 5-7, receives inputs from situation analysis unit 12 and determines to place an incoming call on hold based on the detected situation of the car/driver.

Regarding claims 27 and 42, which recite "wherein the waiting function arranges an indication of the restricted operating mode in dependence on at least one of the expected duration of the restricted operating mode and the person who is calling", the "indication of the restricted operating mode" is the expected duration of call holding as shown in Fig. 3 of Byers.

Regarding claims 28 and 43, which recite "wherein the indication comprises at least one of a voice output for outputting information and a sound output for bridging the waiting time", the message to the caller indicating an amount of time on hold (as taught in section [0023] of Byers) is an "indication comprising voice output" as recited.

Regarding claims 29 and 44, which recite "wherein the indication comprises at least one output pause with an adjustable duration", as the values of call holding in Byers may be one of 10, 20, or 30 seconds and 1, 2, or 3 minutes, and the voice message to the caller will be less than these call holding times, each message will have a pause (no voice message, i.e. silence) with an "adjustable duration", as the amount of pause changes based on the amount of silence during the hold.

Regarding claims 30 and 45, which recite "wherein the at least one output pause can be inserted at least one of before or after the information output and before or after the sound output", as described above with respect to claims 29 and 44, a pause (silence) is inherently present and/or inserted while holding a call.

Regarding claim 31, which recites "further including at least two time ranges provided for arranging the indication, one of said at least two ranges is selected in dependence on the expected duration determined for the restricted operating mode, wherein the time range containing the value of the expected duration is selected", this would be performed as described above with respect to claim 25, by modifying Shimizu so that each situation (shown in Fig. 4 of Shimizu) is associated with an "expected duration" (as taught by Byers).

Regarding claim 32, which recites "wherein for each time range, at least two indication variants are provided, and one of said variants is selected by means of a random number generator", it would be an obvious matter of design choice for one of ordinary skill in the art to modify the Shimizu/Byers combination to include two time variations in a time range and to select one based on a random number generator, as recited.

Regarding claims 34 and 46, which recite "wherein the sound output comprises at least one of discrete sound events and changeable sound events", the message to the caller indicating an amount of time on hold (as taught in section [0023] of Byers) is a "discrete sound event" as recited.

Regarding claim 40, which recites "A communication system for a motor vehicle with a radio interface for wireless connection to a radio communication network and for setting up a corresponding communication link, including a user interface according to claim 25", the system of Shimizu includes a "radio interface" for establishing communication links (telephone calls) as recited.

7. Claims 33, 35-37 and 47-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Byers (under section 102) or the Shimizu/Byers combination (under section 103) as applied to claims 25-31, 34 and 40-46 as addressed above in the respective rejections, and further in view of U.S. Patent 7,174,011 to Kortum et al. (hereinafter "Kortum").

Regarding claim 33, which recites "wherein the sound output comprises at least a part of a known musical item, wherein a time position within the musical item with which the sound output begins, calculated to the end of the musical item, corresponds to the required duration for the sound output for bridging the waiting time", neither Byers or the Shimizu/Byers combination include this feature as recited.

In an analogous art, Kortum teaches a call holding system which includes the ability to provide a number of different musical indications to a holding party. Kortum teaches in column 5, lines 1-8, that the "familiar "do re me fa so…" musical scale...the wait time would be completed with the last note", and "when the music nears completion, the customer knows that the wait time is near completion", which reads on the recited language in claim 33.

Therefore, it would have been obvious to one of ordinary skill in the art to modify either Byers or the Shimizu/Byers combination to include music while holding as recited, when the hold times may be longer than a few seconds, so as to keep the calling parties informed of the wait time and keep them on the line, as is conventional.

Regarding claims 35 and 47, which recite "wherein the changeable sound events are achieved by varying a basic pattern by changing at least one of the instrumentation and the pitch and the register and the volume and the dynamic range and the speed and the rhythm and the tone sequence and the melody", see Figs. 3-4 of Kortum, which teach changing amplitude (recited volume) and pitch in proportion to wait time, as recited.

Regarding claim 36, which recites "wherein an acoustic echo sounding signal or a metronome signal is used as basic pattern", as Kortum teaches numerous examples of changing musical patterns and/or the music itself, it would have been obvious to one of ordinary skill to modify either Byers or the Shimizu/Byers combination with the ability to use an echo or metronome sound, as recited.

Regarding claims 37 and 48, which recites "wherein the sound events are changed in proportion to the decreasing waiting time", see Figs. 3-4 of Kortum, which teach changing amplitude and pitch in proportion to wait time, as recited.

8. Claims 38-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over either the Byers/Korum combination or the Shimizu/Byers/Korum combination as applied to claims 33, 35-37 above, and further in view of U.S. Patent 7,010,288 to Brown et al. (hereinafter "Brown").

Regarding claim 38, which recites "wherein possible callers are divided into different categories, the different categories in each case comprising separate personal voice outputs of the user", Shimizu, Byers and Korum do not teach this recited feature.

In an analogous art, Brown teaches a mobile phone which includes the capability of providing different messages to callers based on the state of the device and the identified caller. See for example, the description of Fig. 5 in columns 5-6 which teaches that "a user could have different pre-programmed messages for family members, friends, business associates, his or her boss, etc., and could select the appropriate response based on caller ID and/or ANI information", which teaches the recited features in claim 38.

Therefore, as Brown also teaches that the user may preprogram messages which include callback time information (see column 6 lines 11-25), it would have been obvious to one of ordinary skill in the art to modify either the Byers/Korum combination or the Shimizu/Byers/Korum combination, to include the feature of identifying callers and providing appropriate messages based on the identified caller, as is conventional.

Regarding claim 39, which recites "wherein the different categories comprise at least one of a private domain and a business domain and a neutral domain", see columns 5-6 of Brown.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven Kelley whose telephone number is (571) 272-5652. The examiner can normally be reached on Monday-Friday, 9AM to 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/SSK/

/NICK CORSARO/
Supervisory Patent Examiner, Art Unit 2617